UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,571	06/15/2005	Antonius Hendrikus Johannes Norp	PTT209(402790US)	9051
	7590 10/15/200 N & ASSOCIATES	EXAMINER		
P.O. BOX 8489			NILANONT, YOUPAPORN	
RED BANK, NJ 07701-8489			ART UNIT	PAPER NUMBER
			2446	
			MAIL DATE	DELIVERY MODE
			10/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commons	10/538,571	NORP ET AL.				
Office Action Summary	Examiner	Art Unit				
	YOUPAPORN NILANONT	4121				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	L. viely filed the mailing date of this communication.				
Status						
1) Responsive to communication(s) filed on 15 Ju	1) Responsive to communication(s) filed on <u>15 June 2005</u> .					
2a) This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
3)☐ Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected.						
7)⊠ Claim(s) <u>1,5,6 and 13-16</u> is/are objected to. 8)□ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on 15 June 2005 is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/15/2005.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te				

Art Unit: 4121

DETAILED ACTION

Drawings

- 1. The drawings are objected to because descriptive legends are required for various elements in figures 1-3 and the various messages and responses in figures 4-8 for a better understanding of the invention. See 37 CFR 1.84(o).
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "multicast announcements 8 and 8" cited on line 26 of page 16 are not shown.
- 3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 4121

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

- 4. The disclosure is objected to because of the following informalities:
 - a. "than" on line 28 of page 13 should be --then--;
 - b. "well know" on line 3 of page 15 should be --well known--.

Appropriate correction is required.

Claim Construction

5. The portions of claims 1, 2, 4, 7-8, and 12 following "arranged to", "arranged for" or "whereby" recite intended use and do not impose any particular structural or functional requirements, and therefore do not limit the claims (see MPEP §2106(II) and 2111.04). In the discussion of the claims below, these materials have been placed in double square brackets indicating that even though they have not been given any patentable weight, they have been fully considered.

Claim Objections

- 6. Claims 1, 5-6, and 13-16 are objected to because of the following informalities:
- a. claim 1 recites "communicatable" on line 7 which should be --communicable--;
 - b. claims 5-6 and 14-15 recite acronyms such as "GGSN" and "SGSN" which should be accompanied by their complete name to prevent any ambiguity that may arise.

Art Unit: 4121

7. Claims 13-16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 13 recites "the method according to claim 15" which is not a preceding claim therefore, it is an improper dependent claim.

Claims 14-16 fails to further limit the method of claim 13 because they recite limitations to the structure of the claimed apparatus which do not limit the steps of protecting overload in the network.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 7 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 10. The term "substantially identical" in claim 7 is a relative term which renders the claim indefinite. The term "substantially identical" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Because "substantially" means "ample or considerable amount or quantity,"

Art Unit: 4121

claim 7 is indefinite since one of ordinary skill in the art would not have known how similar content has to be in order to be considered as "substantially identical".

- 11. Claim 13 recites the limitation "the broadcast message" and "the multicast message" in lines 7 and 8. There is insufficient antecedent basis for these limitations in the claim. For purposes of examination, they have been construed as "the distributable content message (6)" that has been either broadcasted or multicasted in claim 12.
- 12. Claim 13 is recited as depending on claim 15 which depends on claim 13. Due to the ambiguities and confusion in claims 13-16, no art has been applied thereto, see *In re Steele*, 49 CCPA 1295, 305 F.2d 859, 134 USPQ 292 (1962) and *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). The examiner will not speculate as to the intended meaning.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 14. Claims 1, 3, 7, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al. (U.S. Patent No. 6,512,776).
- 15. Regarding claim 1, the Jones reference teaches a system for overload protection in a data network for information delivery (see Jones, figure 2), comprising

a server (see Jones, figure 2, "source1 14" and "source2 12") [arranged to transmit a plurality of unicast content messages comprising a substantially identical content (see Jones, column 2 lines 44-52, "separate data streams 24, 26"), communicatable via a data network, having unicast and distribution capabilities, to a plurality of terminals respectively, each one of the plurality of unicast content messages corresponding to one of the plurality of terminals],

a message interceptor, comprising a computer (see Jones, figure 2, "router 16"), [arranged for receiving from the data network the plurality of unicast content messages with the substantially identical content],

the computer further [arranged for grouping the plurality of unicast content messages with the substantially identical content into a distributable content message comprising the substantially identical content (see Jones, column 2 lines 44-48, "one multicast transmission 28")],

the computer further [arranged for communicating the distributable content message, to the plurality of terminals via the data network (see Jones, figure 2, "client 1" and "client 2")],

[whereby the plurality of unicast content messages, with the substantially identical content, for the plurality of terminals are routable by the data network to the message interceptor (see Jones, figure 2 and column 2 lines 44-47, "come to the router")], and

the distributable content message is distributable by the data network to the plurality of terminals (see Jones, figure 2, "multicast transmission 28," "client 1" and "client 2").

16. Regarding claim 3, the Jones reference teaches the system according to claim 1, wherein the distributable content message comprises one of a broadcast content message and a multicast content message,

and the data network distribution capability comprises the ability to broadcast or multicast the broadcast or the multicast content message respectively (see Jones, figure 2 "multicast data stream 28" and column 2 lines 33-36).

17. Regarding claim 7, the Jones reference teaches a message interceptor for overload protection in a data network for information delivery, comprising a computer (see Jones, figure 2, "router 16"),

[arranged for receiving from the data network a plurality of unicast content messages with the substantially identical content (see Jones, figure 2 and column 2 lines 44-52, "separate data streams 24, 26")],

the computer further [arranged for grouping the plurality of unicast content messages with the substantially identical content into a distributable content message comprising the substantially identical content (see Jones, column 2 lines 44-48, "one multicast transmission 28")],

the computer further [arranged for communicating the distributable content message, to a plurality of terminals via the data network, each one of the plurality of

Art Unit: 4121

terminals corresponding to one of the plurality of unicast content messages (see Jones, figure 2, "client 1" and "client 2")],

[whereby the plurality of unicast content messages, with the substantially identical content, for the plurality of terminals are routable by the data network to the message interceptor (see Jones, figure 2 and column 2 lines 44-47, "come to the router")],

and the distributable content message is distributable by the data network to the plurality of terminals (see Jones, figure 2, "multicast transmission 28," "client 1" and "client 2").

18. Regarding claim 9, the Jones reference teaches the message interceptor according to claim 7, wherein the distributable content message comprises one of a broadcast content message and a multicast content message,

and the data network distribution capability comprises the ability to broadcast or multicast the broadcast or the multicast content message respectively (see Jones, figure 2 "multicast data stream 28" and column 2 lines 33-36).

19. Regarding claim 10, the Jones reference teaches a method for overload protection in a data network for information delivery, comprising

communicating by a server a plurality of unicast content messages having a substantially identical content, via the data network to a plurality of terminals respectively, each one of the plurality of unicast content messages corresponding to one of the plurality of terminals (see Jones, column 2 lines 43-46),

Art Unit: 4121

routing the plurality of unicast content messages with the substantially identical content to a message interceptor (see Jones, figure 2 "router 16"),

receiving the plurality of unicast content messages with the substantially identical content by the message interceptor (see Jones, column 2 lines 59-60),

grouping the plurality of unicast content messages with the substantially identical content into a distributable content message by the message interceptor (see Jones, column 4 lines 32-34),

distributing the distributable content message to the plurality of terminals via the data network by the message interceptor (see Jones, column 4 lines 32-34 and 39-43).

Claim Rejections - 35 USC § 103

- 20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 21. Claims 2, 8, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent No. 6,512,776) in view of Chennikara et al. ("Application-Layer Multicast for Moblie Users in Diverse Networks").
- 22. Regarding claim 2, the Jones reference teaches a system according to claim 1. However, Jones does not teach a system wherein the message interceptor is [arranged to communicate the distributable content message to a node in the data network].

Conversely, the Chennikara reference discloses a system that uses tunneling techniques to encapsulate multicast packets in unicast packet and routes them to local

proxies before multicasting packets to mobile users (see Chennikara, page 1, right-hand column, lines 40-45).

the node defining a data network segment (see Chennikara, page 3, figure 1, "Local Proxy"),

the node is [arranged for distributing the distributable content message via the data network to at least one of the plurality of terminals (see Chennikara, page 3, figure 1, "tunneling enabled" (mobile users))].

It would have been obvious to the person of ordinary skill in the art, at the time the invention was made to have incorporated the use of tunneling technique and local proxy as taught by Chennikara in Jones' system in order for Jones' router to communicate with client devices that reside in non-multicast enabled networks, taking into account that the global network such as the Internet is made up of diverse networks.

23. Regarding claim 8, the Jones reference teaches the message interceptor according to claim 7 however, Jones does not teach the computer is [arranged to communicate the distributable content message to a node in the data network].

Conversely, the Chennikara reference teaches a computer that forwards a packet to a local node which, then, forwards packet to subscribed mobile users (see Chennikara, page 3, left-hand column, first full paragraph).

Chennikara further teaches the node defining a data network segment (see Chennikara, page 3, figure 1, "Local Proxy"), the node is [arranged for distributing the distributable content message via the data network to at least one of the plurality of terminals (see Chennikara, page 3, figure 1, "tunneling enabled" (mobile users))].

It would have been obvious to the person of ordinary skill in the art, at the time the invention was made to have incorporated the use of tunneling technique and local proxy as taught by Chennikara in Jones' system in order for Jones' router to communicate with client devices that reside in non-multicast enabled networks, taking into account that the global network such as the Internet is made up of diverse networks.

24. Regarding claim 11, Jones teaches the method according to claim 10 but fails to disclose a step of forwarding packets to a node which is an intermediary device between user's terminal and the router. Conversely, Chennikara teaches a method comprising communicating the distributable content message to a node in the data network (see Chennikara, page 4, lines 9-11), the node defining a data network segment (see Chennikara, page 3, section B. "Local Proxy" lines 3-4) by the message interceptor, distributing the distributable content message via the data network to at least one of the plurality of terminals by the node (see Chennikara, figure 2, and page 4, lines 18-19 and 23-24).

It would have been obvious to the person of ordinary skill in the art, at the time the invention was made, to have incorporated the method of using local proxies as taught by Chennikara in Jones' system in order for Jones' router to communicate with client devices that may reside in non-multicast enabled networks.

Art Unit: 4121

25. Regarding claim 12, the Jones and Chennikara references teach the method according to claim 11. The Jones reference further teaches distributing the distributable content message, whereby the data network is [arranged to broadcast or multicast the distributable content message respectively (see Jones, figure 2 "multicast data stream 28" and column 2 lines 33-36)].

- 26. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent No. 6,512,776) in view of Hauge et al. ("Multicast in 3G Networks: Employment of Existing IP Multicast Protocols in UMTS").
- 27. Regarding claim 4, the Jones reference teaches the system according to claim 3 however, it does not disclose the plurality of terminals comprise a mobile terminal.

 Furthermore, it does not disclose the data network comprises a radio network, the data network communicates with a radio base station which is [arranged to communicate with the mobile terminal via the radio network], and the radio network comprises a radio interface, and the radio network is [arranged to broadcast the distributable content message].

Conversely, the Hauge reference teaches a mobile terminal (see Hauge, figure 1, "UMTS Terminal"), a radio network that allows communication between mobile terminal and a radio base station (see Hauge, figure 1, "UMTS Core Network (CN)", "Radio Network Subsystem (RNS)", and "Node-B"), and a radio interface (see Hauge, figure 1, "(RNS)" on the right hand side).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made to have included Hauge's communication system as

Art Unit: 4121

Jones' client subsystem in order to accommodate mobile client devices such as mobile phones which may want to access same sporting event content from the Internet.

- 28. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent No. 6,512,776) in view of Chennikara et al. ("Application-Layer Multicast for Mobile Users in Diverse Networks") as applied to claim 2 above, and further in view of Hauge et al. ("Multicast in 3G Networks: Employment of Existing IP Multicast Protocols in UMTS").
- 29. Regarding claim 5, the Jones and Chennikara references teach the system according to claim 2 but do not teach that the node comprises a GGSN. On the other hand, the Hauge reference teaches of such limitation.

It would have been obvious to person with ordinary skill in the art, at the time of the invention, to have used the Hauge's GGSN as Chennikara's local proxy in order to adapt to 3G mobile networks since Chennikara's local proxy acts as a gateway to mobile users.

Regarding claim 6, the Jones and Chennikara references teach the system according to claim 2, but do not teach that the node comprises an SGSN. On the other hand, the Hauge reference teaches of such limitation.

It would have been obvious to person with ordinary skill in the art, at the time of the invention, to have included Hauge's SGSN as a proxy in Chennikara's mobile access network since Hauge's 3G mobile network was developed and said to have been the future of mobile network at the time of the invention.

Art Unit: 4121

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUPAPORN NILANONT whose telephone number is (571)270-5655. The examiner can normally be reached on Monday through Thursday and alternate Friday at 7:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Robertson can be reached on 571-272-4186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. N./ Youpaporn Nilanont 10/08/2008 Examiner, Art Unit 4121 /David L. Robertson/ Supervisory Patent Examiner Art Unit 4121